

Approved For Release 2003/08/08 : CIA-RDP80-01060A000100010001-8

SECRET

6408R000900010021-8

25X1

**STUDY OF RICE CROPS
NEAR NINH BINH, NORTH VIETNAM
20-12N 106-07E**

Declass Review by
NIMA/DOD

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N O R D - I N T E N A M

Province de NAM DINH
Province de NINH BINH

Map of the border area between Cambodia and Vietnam, showing the border line, the border zone, and the provinces of Cambodia and Vietnam.

$$G \cup L \cup F$$

Muang
Nakhon Phanom Khammouan

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17 18

Scale 1:50,000

The graphic scale bar consists of two horizontal lines. The top line is marked with '1', '0', '1', '2', and '3 Miles'. The bottom line is marked with '1000', '500', '0', '1000', '2000', '3000', and '4000 Meters'. The bar is divided into segments corresponding to these markings.

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3 March 1966

MEMORANDUM FOR: Chairman, BCW Task Force

SUBJECT: Interim Report on North Vietnam Crop Study

REFERENCE: Requirement No. TF-51 (SIC-5-6) NPIC Project No. 11221-6

1. This memorandum is a partial answer to a requirement requesting a study of the feasibility of determining the type, vigor and crop season of agriculture in North Vietnam by use of aerial photography. The original requirement requested that this be carried out on a line running from the vicinity of Vinh (1840N 10545E) thru Thanh Hoa (1945N 10545E) to the vicinity of Haiphong (2100N 10645E). A study of this line was not feasible due to the lack of suitable periodic coverage over the complete area and the size of the area. Verbal approval was given by the requester to deviate from this line and select a typical sample area. An area of approximately $1\frac{1}{2}$ square miles was selected southeast of Ninh Binh at 2012N 10607E.

2. Within this area the crops were divided into two categories, rice and row crops. There are two main rice crops a year, a fifth month, (January to June dry season crop) and a tenth month (June to January wet season) crop. Small plots of rice generally mixed with the plots of row crops near the villages are grown at different times. Rice planting was not detected on this photography, however good quality low altitude photography would probably reveal this. The only change during the growth of the rice as it appeared on high level photography was in the tone of the rice imagery. Near harvest time a slightly rough or textured appearance develops. Harvest can be detected by the removal of the rice from the fields.

3. Row crops were generally of the smaller type such as vegetables and not the larger type such as corn or cane. More land was planted to row crops during the fifth month season. The fields which had been used for row crops in the fifth month season were switched to rice for the tenth month season.

4. Plant vigor and yield could not be evaluated at this time from high level photography. It might be possible to give some estimate of plant vigor by height measurement on low altitude oblique photography. Some estimate of yield could perhaps be made from the measurements of plant density on low altitude, good quality vertical photography. Some

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3 March 1966
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SUBJECT: Interim Report on North Vietnam Crop Study

indication of yield could possibly be derived from the interpretation of natural environmental factors and agricultural activity. Work is continuing on this project. A minimum of three additional areas in the Red River Basin are being selected and studied on the basis of available timely photography to try and determine the exact planting date of rice and check on the progression of planting dates in different locals.



Colonel, USA
Assistant for Photographic Analysis, NPIC

Attachment:

*Photography used in attached photographic supplement

Distribution:

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- 11 - AFMIE-BA Attn: [redacted]
- 12 - OPNAV-922Y3 Attn: [redacted]
- 13 - Army/SPAD Attn: [redacted]

10 - NSA/LO/NPIC [redacted]

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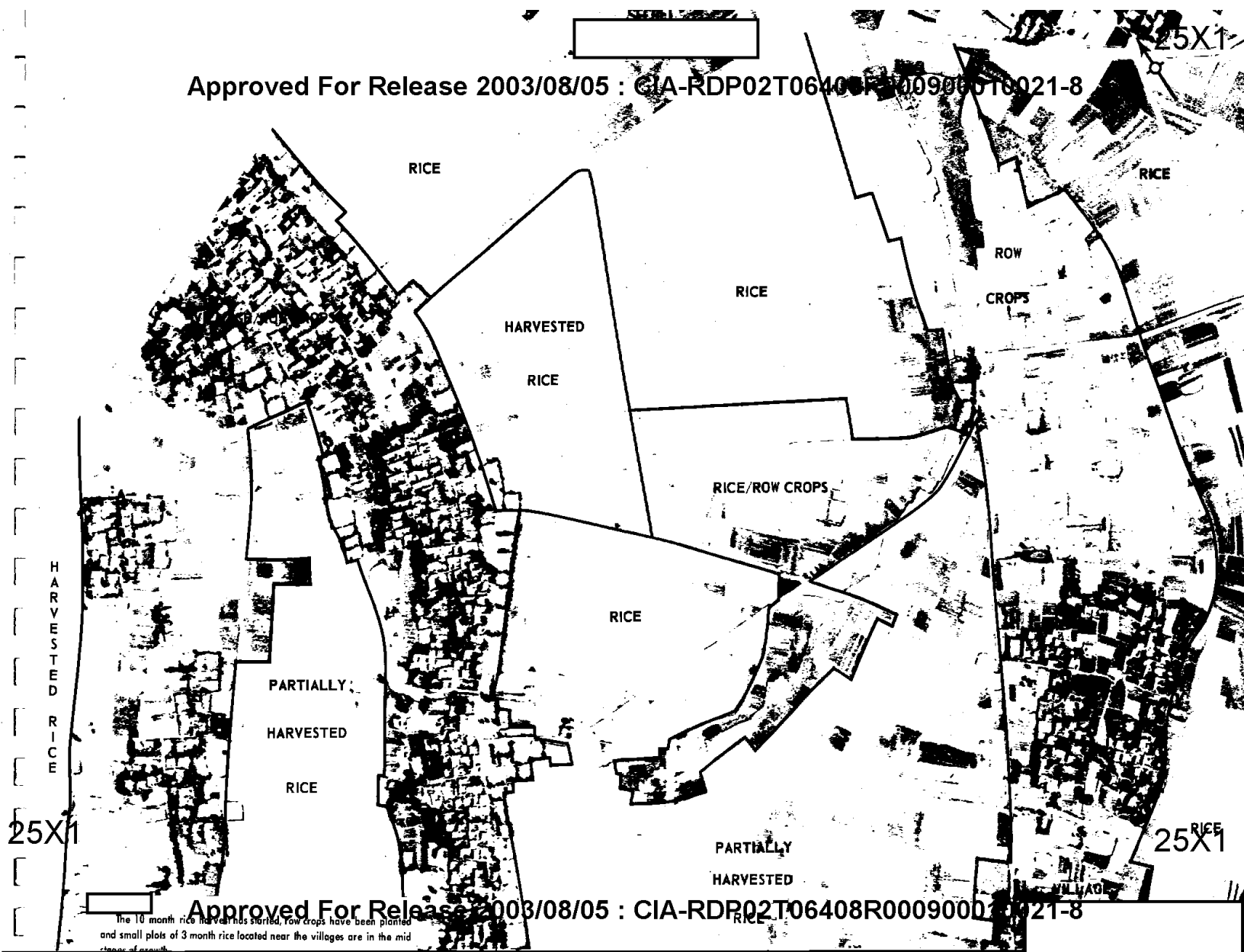
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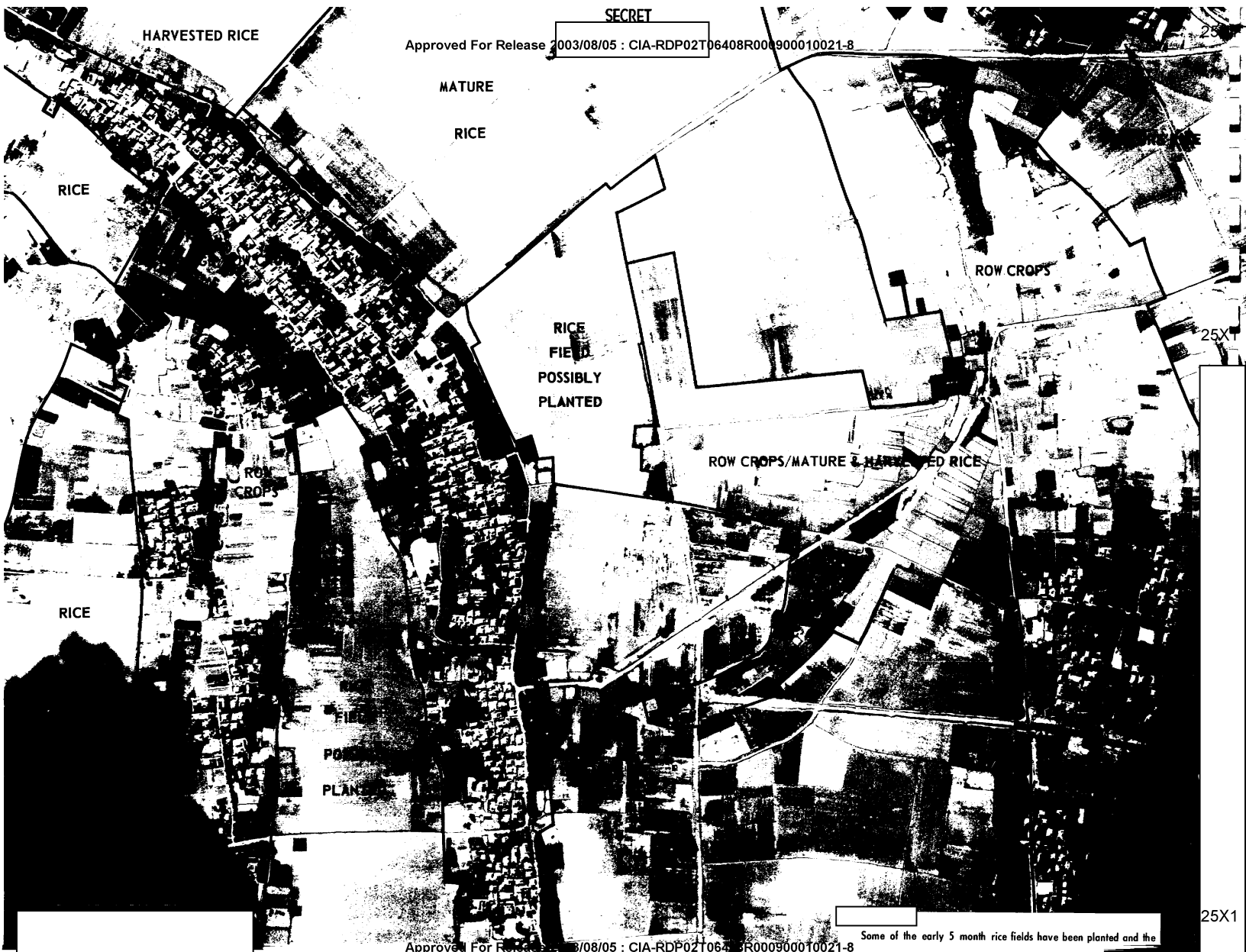
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The 10 month rice harvest has started. Row crops have been planted and small plots of 3 month rice located near the villages are in the mid stages of growth.



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MATURE

RICE

RICE

RICE
FIELD
POSSIBLY
PLANTED

ROW CROPS

ROW CROPS/MATURE & HARVESTED RICE

RICE

FIELDS
POSSIBLY
PLANTED

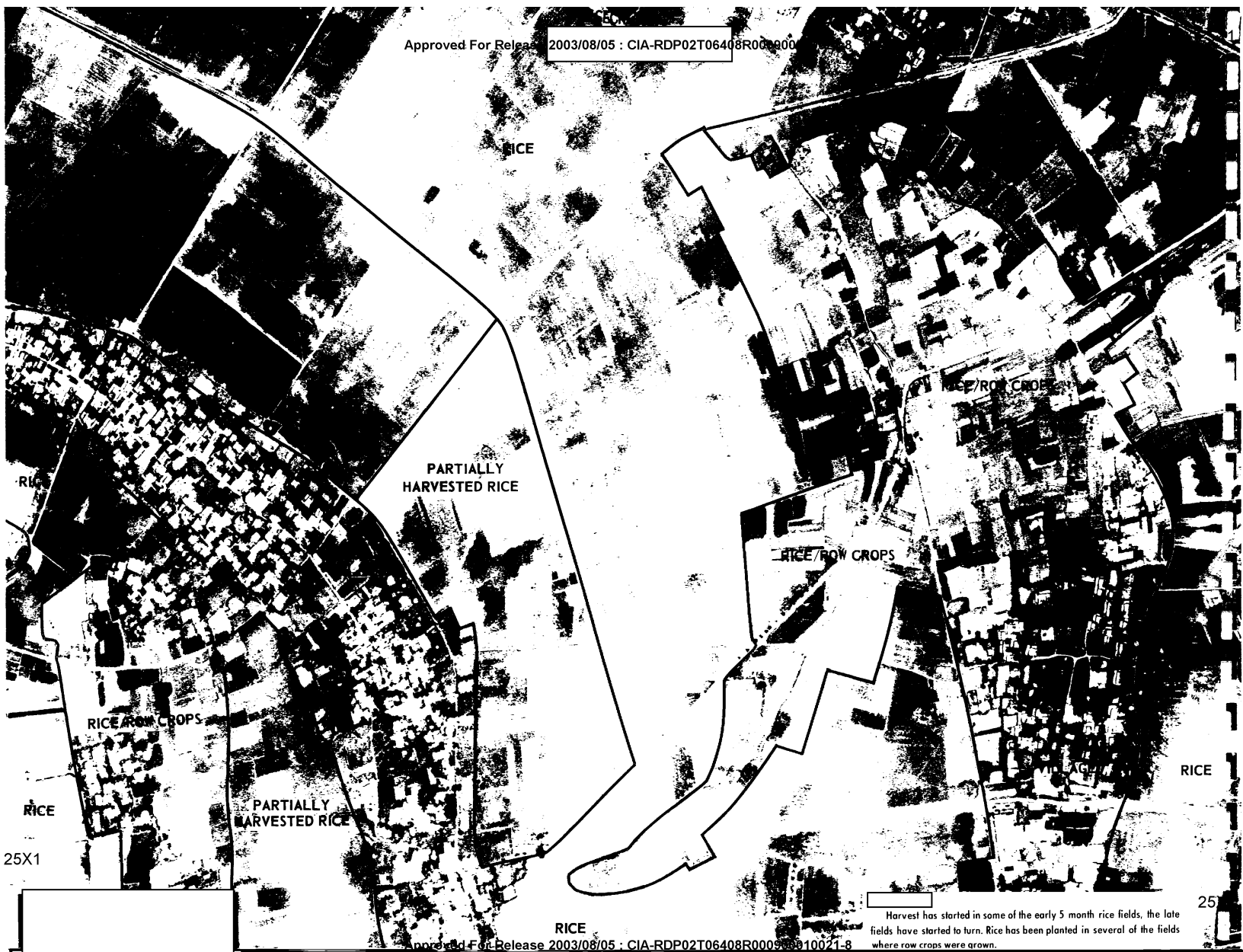
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Some of the early 5 month rice fields have been planted and the

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Harvest has started in some of the early 5 month rice fields, the late fields have started to turn. Rice has been planted in several of the fields where row crops were grown.

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RICE FIELD

RICE

FLOODED
RICE FIELD

RICE ROW CROPS

VILLAGE

RICE

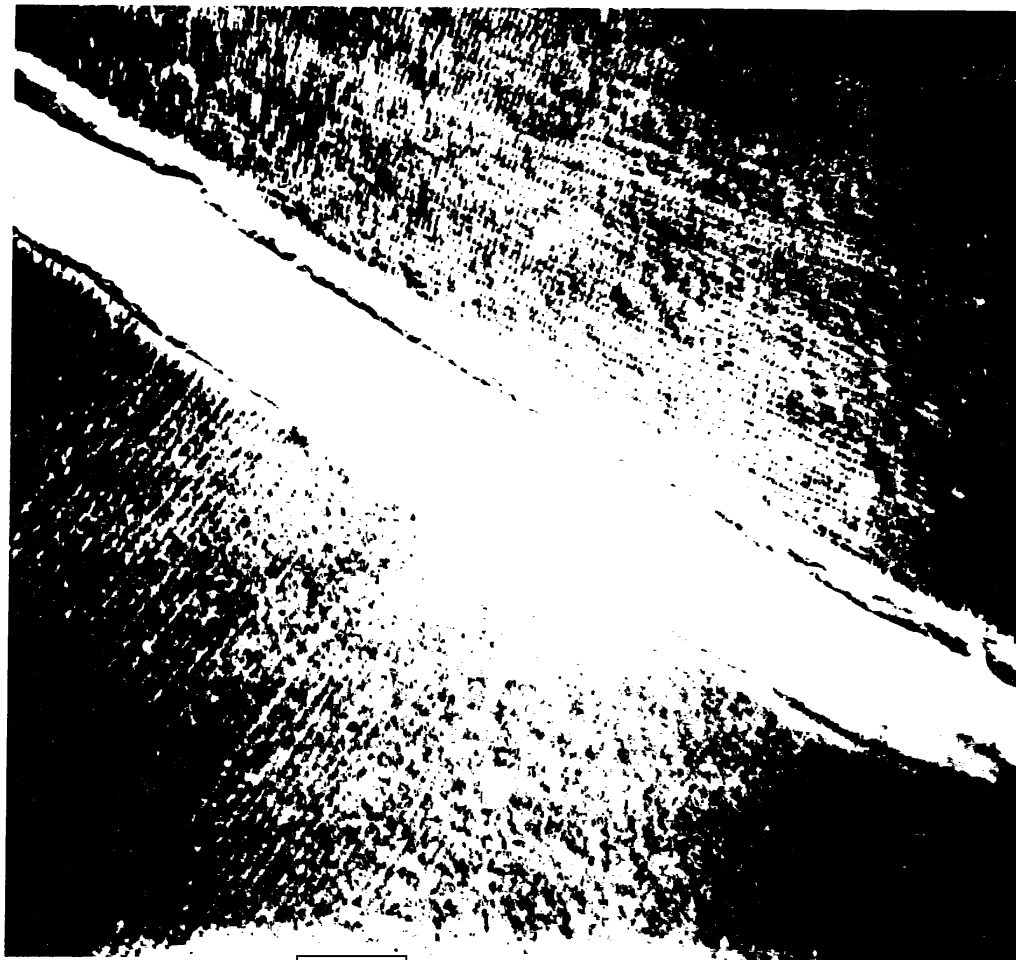
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Flooding in some of the fields appears to be deep enough to defer planting. Some of the early fields are planted. More rice and fewer row

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Individual rice plants are visible on this large scale photography,
however, area coverage is limited.

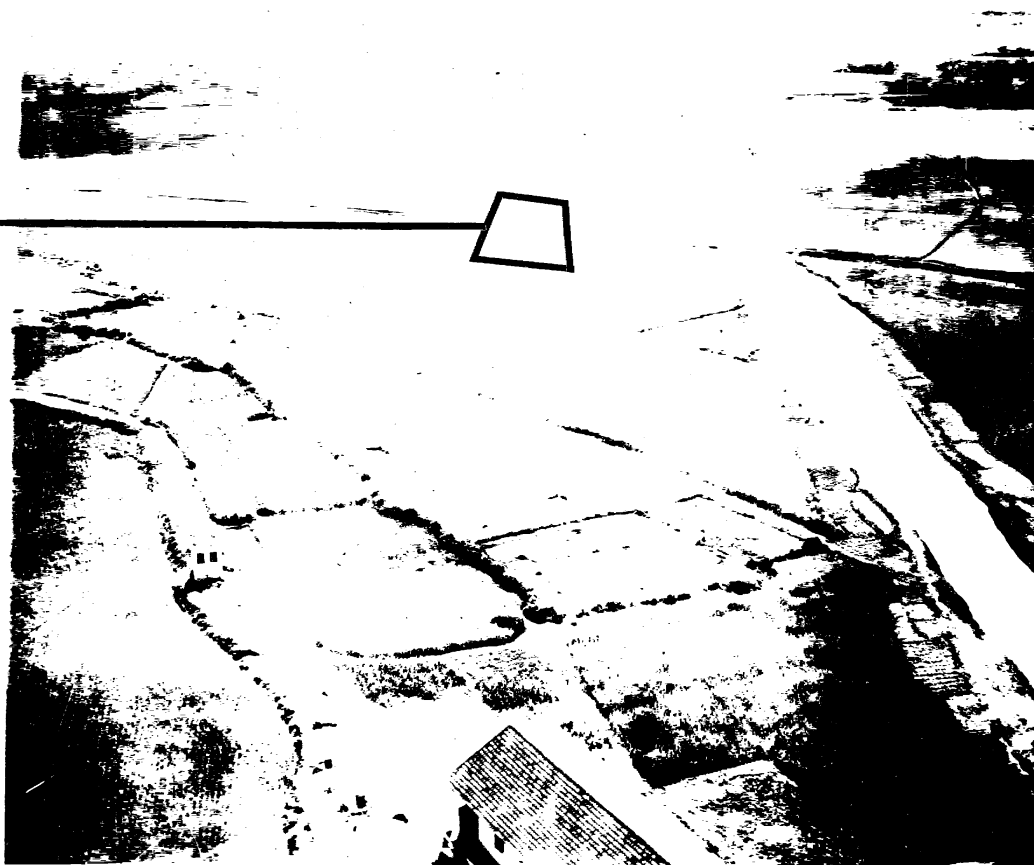
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Some row crops are visible in the foreground. The 10 month rice
will probably be harvested in December or January.

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